

New York State Department of Environmental Conservation
Facility DEC ID: 9043600022



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 9-0436-00022/00005
Mod 0 Effective Date: 05/11/2004 Expiration Date: 05/11/2009

Mod 1 Effective Date: Expiration Date:

Permit Issued To: LAIDLAW ENERGY & ENVIRONMENTAL INC
6662 ROUTE 219
PO BOX 500
ELLCOTTVILLE, NY 14731-0500

Contact: RICHARD E MORRICAL
PO BOX 121
OXFORD, MD 21654-0121
(410) 226-5498

Facility: LAIDLAW ENERGY AND ENVIRONMENTAL INC
6662 US RTE 219
ELLCOTTVILLE, NY 14731-0500

Contact: RODNEY GOODE
LAIDLAW ENERGY AND ENVIRONMENTAL
PO BOX 500
ELLCOTTVILLE, NY 14731-0500
(716) 699-2425

Description:
Laidlaw Energy and Environmental, Inc. (REN 1, MOD 1):

The permittee is modifying the current Title V Air Permit to replace the Allison 501KB natural gas combustion gas turbine with a wood burning fuel cell boiler to generate steam for steam turbine electric generator sets and heat for the existing wood kilns. The Allison turbine has not operated since 2003 because fuel prices make it uneconomical and it will be removed from the property. The boiler will replace 5.3 gross megawatts (MW) generating capacity with 7 MW gross generating capacity. This will satisfy the permittee's contract to supply 3.79 MW to Niagara Mohawk and the balance will be used to operate the plant.

The permittee will install a 115 million Btu per hour Wellons four (4) cell fuel cell boiler that will burn clean unadulterated wood waste, primarily wood chips from hogged scrap pallets. A secondary fuel is clean green wood waste from clearings, etc. It will use a mechanical collector (multiclone) and a fire resistant baghouse to control particulate emissions. It will use flue gas recirculation and staged



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combustion to control nitrogen oxide (NO_x) emissions.

Besides the wood boiler, other emission sources include the two emergency 450 kW natural gas fired engine generators (CAT 3 and CAT 4), two non-contact water cooling towers, a small natural gas boiler and two lumber drying kilns. In the previous permit (Ren 1, Mod 0) the CAT 4 generator was defined as emission unit U-00002 and was permitted to operate as an electric generator and heat source for the wood kilns. CAT 4 will now be operated only as an emergency generator and is exempt from permitting. As emergency generators each engine is limited to 500 hours of operation annually which the permittee must demonstrate to the Department upon request. The two non-contact steam condensing/cooling towers are exempt from permitting, as is the 4.18 mmBtu/hr natural gas fired boiler.

This permit modification not only includes the addition of the wood boiler and its associated emission point (BOILR), process description (BLR), and emission sources/controls (00BLR, 000FF, 00CYC, 00FGR) to emission unit U-00001, but it includes the removal of the gas turbine and thus the associated emission point (00001), process description (001), and emission sources/controls (00001) to emission unit U-00001. The removal and end date associated with the above items is the proximate date the permittee intends to remove these items from operation. Since the CAT 4 generator is now exempt from permitting its associated emission unit (U-00002), emission points (00002, 00003), process description (002), and emission sources/controls (00002) were expired or removed from service in this permit modification. The removal and end date associated with the CAT 4 is the approximate date that this permit may be issued. The CAT 4 will not be physically removed, but will stay active as an emergency generator which is exempt from permitting.

Dispersion modeling provided by the permittee indicates a stack height of 52.5 feet is adequate to disperse the boiler emissions so that they will not exceed the National Ambient Air Quality Standards. If there are legitimate impacts from the boiler emissions, such as odors, the permittee is responsible for taking the necessary corrective actions, such as evaluating the combustion process or raising the stack height, to remedy the issues.

The statement of basis and other information supporting this permit can be found in the Permit Review Report which is a separate document. However to summarize, the facility is subject to: 40 CFR Part 60 subpart A (General Provisions for New Source Performance Standards - NSPS); 40 CFR Part 60 subpart Db (NSPS for Industrial-Commercial-Institutional Steam Generating Sources 100 - 250 million Btu per hour) which sets opacity and particulate standards; 40 CFR Part 64 (Compliance Assurance Monitoring (CAM)) for particulate matter (PM) and nitrogen oxides (NO_x); 6NYCRR 227-2.4(b)(2) (Reasonably Available Control Technology (RACT) for Oxides of Nitrogen) which required that a case-by-case RACT analysis be conducted; an emission limit for carbon monoxide (CO) to avoid the Prevention of Significant Deterioration (PSD) requirements of 40CFR Part 52.21. A heat input limit is in place so the NO_x emissions do not trip Non-Attainment New Source Review (NSR) requirements in 6NYCRR Part 231-2, and to keep the CO emissions below the PSD applicability level.

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

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Permit Administrator: STEVEN J DOLESKI
DIVISION OF ENVIRONMENTAL PERMITS
270 MICHIGAN AVE
BUFFALO, NY 14203-2999

Authorized Signature: _____ Date: ____ / ____ / _____



Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

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NO CONDITIONS FOR THIS PERMIT



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ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

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6662 ROUTE 219

PO BOX 500

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Facility:

LAIDLAW ENERGY AND ENVIRONMENTAL INC

6662 US RTE 219

ELLCOTTVILLE, NY 14731-0500

Authorized Activity By Standard Industrial Classification Code:

2421 - SAWMILLS & PLANING MILLS GENERAL

4911 - ELECTRIC SERVICES

Permit Effective Date:

Permit Expiration Date:



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1-1 6NYCRR 200.6: Acceptable Ambient Air Quality
- 1-2 6NYCRR 201-6.5(a)(7): Fees
- 1-3 6NYCRR 215: Open Fires Prohibited at Industrial and Commercial Sites
- 1-4 6NYCRR 200.7: Maintenance of Equipment
- 1-5 6NYCRR 201-1.7: Recycling and Salvage
- 1-6 6NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
- 1-7 6NYCRR 201-3.2(a): Exempt Sources - Proof of Eligibility
- 1-8 6NYCRR 201-3.3(a): Trivial Sources - Proof of Eligibility
- 1-9 6NYCRR 201-6.5(a)(4): Standard Requirement - Provide Information
- 1-10 6NYCRR 201-6.5(a)(8): General Condition - Right to Inspect
- 1-11 6NYCRR 201-6.5(d)(5): Standard Requirements - Progress Reports
- 1-12 6NYCRR 201-6.5(f)(6): Off Permit Changes
- 1-13 6NYCRR 202-1.1: Required Emissions Tests
- 1-14 6NYCRR 211.3: Visible Emissions Limited
- 9 40CFR 68: Accidental release provisions.
- 1-15 40CFR 68: Accidental release provisions.
- 1 6NYCRR 201-6: Emission Unit Definition

Emission Unit Level

- 11 6NYCRR 201-6: Emission Point Definition By Emission Unit
- 12 6NYCRR 201-6: Process Definition By Emission Unit
- 1-16 6NYCRR 201-7: Emission Unit Permissible Emissions

EU=U-00001

- *1-17 6NYCRR 201-7: Capping Monitoring Condition
- *1-18 6NYCRR 201-7: Capping Monitoring Condition
- 13 6NYCRR 227-1.3(a): Compliance Certification
- 1-19 6NYCRR 227-2.4(b)(2): Compliance Certification
- 1-20 40CFR 60.7(a), NSPS Subpart A: Date of construction notification.
- 1-21 40CFR 60.7(c), NSPS Subpart A: Excess Emissions Report
- 1-22 40CFR 60.7(d), NSPS Subpart A: Excess emissions report.
- 1-23 40CFR 60.8(a), NSPS Subpart A: Performance testing timeline.
- 1-24 40CFR 60.13(a), NSPS Subpart A: Compliance Certification
- 1-25 40CFR 60.43b(c)(1), NSPS Subpart Db: Compliance Certification
- 1-26 40CFR 60.43b(f), NSPS Subpart Db: Compliance Certification
- 1-27 40CFR 60.46b(d), NSPS Subpart Db: Compliance Certification
- 1-28 40CFR 64: Compliance Certification
- 1-29 40CFR 64: Compliance Certification

EU=U-00001,Proc=001

- 16 40CFR 60.332(a)(2), NSPS Subpart GG: Compliance Certification



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- 17 40CFR 60.332(a)(2), NSPS Subpart GG: Compliance Certification
- 18 40CFR 60.333(b), NSPS Subpart GG: Compliance Certification
- 19 40CFR 60.334(b)(2), NSPS Subpart GG: Compliance Certification
- 20 40CFR 60.334(c)(2), NSPS Subpart GG: Compliance Certification
- 21 40CFR 60.335(c)(1), NSPS Subpart GG: Nitrogen oxides emission rate calculation
- 22 40CFR 60.335(c)(3), NSPS Subpart GG: Use of Method 20 for determining NO_x and SO₂
- 23 40CFR 60.335(d), NSPS Subpart GG: Methods for determining compliance with the sulfur content standard
- 24 40CFR 60.335(e), NSPS Subpart GG: Requirement for analysis of Nitrogen and Sulfur in fuel

EU=U-00002

- 25 6NYCRR 202-2.4(a): Compliance Certification
- 26 6NYCRR 227-1.3(a): Compliance Certification

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 27 ECL 19-0301: Contaminant List

Emission Unit Level

EU=U-00001

- 1-30 6NYCRR 211.2: Compliance Demonstration

NOTE: * preceding the condition number indicates capping.



FEDERALLY ENFORCEABLE CONDITIONS

****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

The items listed below are not subject to the annual compliance certification requirements under Title V. Permittees may also have other obligations under regulations of general applicability.

Item A: Emergency Defense - 6NYCRR Part 201-1.5

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the facility owner and/or operator can identify the cause(s) of the emergency;

(2) The equipment at the permitted facility causing the emergency was at the time being properly operated;

(3) During the period of the emergency the facility owner and/or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(4) The facility owner and/or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner and/or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

Item B: Public Access to Recordkeeping for Title V Facilities - 6NYCRR Part 201-1.10(b)

The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to

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Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.

Item C: Timely Application for the Renewal of Title V Permits - 6 NYCRR Part 201-6.3(a)(4)

Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

Item D: Certification by a Responsible Official - 6 NYCRR Part 201-6.3(d)(12)

Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Item E: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.5(a)(2)

The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

Item F: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.5(a)(3)

This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Item G: Cessation or Reduction of Permitted Activity Not a Defense - 6NYCRR Part 201-6.5(a)(5)

It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in

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order to maintain compliance with the conditions of this permit.

Item H: Property Rights - 6 NYCRR Part 201-6.5(a)(6)

This permit does not convey any property rights of any sort or any exclusive privilege.

Item I: Severability - 6 NYCRR Part 201-6.5(a)(9)

If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

Item J: Permit Shield - 6 NYCRR Part 201-6.5(g)

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

- i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;
- ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;
- iii. The applicable requirements of Title IV of the

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Act;

iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

Item K: Reopening for Cause - 6 NYCRR Part 201-6.5(i)

This Title V permit shall be reopened and revised under any of the following circumstances:

i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.

ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.

iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

Proceedings to reopen and issue Title V facility permits shall follow the same procedures as apply to initial permit issuance but shall affect only those parts of the permit for which cause to reopen exists.

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the permit



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is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

Item L: Permit Exclusion - ECL 19-0305

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item M: Federally Enforceable Requirements - 40 CFR 70.6(b)

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS SUBJECT TO ANNUAL CERTIFICATIONS AT ALL TIMES

The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements at all times.

**Condition 1-1: Acceptable Ambient Air Quality
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 200.6

Item 1-1.1:

Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit



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any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

Condition 1-2: Fees
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 201-6.5(a)(7)

Item 1-2.1:

The owner and/or operator of a stationary source shall pay fees to the Department consistent with the fee schedule authorized by ECL 72-0302.

Condition 1-3: Open Fires Prohibited at Industrial and Commercial Sites
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 215

Item 1-3.1:

No person shall burn, cause, suffer, allow or permit the burning in an open fire of garbage, refuse, rubbish for salvage, or rubbish generated by industrial or commercial activities.

**MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS SUBJECT
TO ANNUAL CERTIFICATIONS ONLY IF APPLICABLE**

The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements only if effectuated during the reporting period. [NOTE: The corresponding annual compliance certification for those conditions not effectuated during the reporting period shall be specified as "not applicable".]

Condition 1-4: Maintenance of Equipment
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 200.7

Item 1-4.1:

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications, required to operate such device effectively.

Condition 1-5: Recycling and Salvage
Effective for entire length of Permit



Applicable Federal Requirement: 6NYCRR 201-1.7

Item 1-5.1:

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of the ECL.

**Condition 1-6: Prohibition of Reintroduction of Collected Contaminants to the air
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 201-1.8

Item 1-6.1:

No person shall remove, handle or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

**Condition 1-7: Exempt Sources - Proof of Eligibility
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 201-3.2(a)

Item 1-7.1:

The owner and/or operator of an emission source or unit that is eligible to be exempt may be required to certify that it operates within the specific criteria described in this Subpart. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other State and Federal air pollution control requirements, regulations, or law.

**Condition 1-8: Trivial Sources - Proof of Eligibility
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 201-3.3(a)

Item 1-8.1:

The owner and/or operator of an emission source or unit that is listed as being trivial in this Part may be required to certify that it operates within the specific criteria described in this Subpart. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other State and Federal air pollution control requirements, regulations, or law.

Condition 1-9: Standard Requirement - Provide Information



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Applicable Federal Requirement: 6NYCRR 201-6.5(a)(4)

Item 1-9.1:

The owner and/or operator shall furnish to the department, within a reasonable time, any information that the department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the department copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality, if the administrator initiated the request for information or otherwise has need of it.

Condition 1-10: General Condition - Right to Inspect

Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 201-6.5(a)(8)

Item 1-10.1:

The department or an authorized representative shall be allowed upon presentation of credentials and other documents as may be required by law to:

- (i) enter upon the permittee's premises where a facility subject to the permitting requirements of this Subpart is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;
- (ii) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- (iii) inspect at reasonable times any emission sources, equipment (including monitoring and air pollution control equipment), practices, and operations regulated or required under the permit; and
- (iv) sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

Condition 1-11: Standard Requirements - Progress Reports

Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 201-6.5(d)(5)

Item 1-11.1:

Progress reports consistent with an applicable schedule of compliance are to be submitted at least semiannually, or at a more frequent period if specified in the applicable requirement or by the department. Such progress reports shall contain the following:

- (i) dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

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(ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

Condition 1-12: Off Permit Changes
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 201-6.5(f)(6)

Item 1-12.1:

No permit revision will be required for operating changes that contravene an express permit term, provided that such changes would not violate applicable requirements as defined under this Part or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting, or compliance certification permit terms and conditions. Such changes may be made without requiring a permit revision, if the changes are not modifications under any provision of title I of the act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions) provided that the facility provides the administrator and the department with written notification as required below in advance of the proposed changes within a minimum of seven days. The facility owner or operator, and the department shall attach each such notice to their copy of the relevant permit.

(i) For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(ii) The permit shield described in section 6 NYCRR 201-6.6 shall not apply to any change made pursuant to this paragraph.

Condition 1-13: Required Emissions Tests
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 202-1.1

Item 1-13.1:

For the purpose of ascertaining compliance or non-compliance with any air pollution control code, rule or regulation, the commissioner may require the person who owns such air contamination source to submit an acceptable report of measured emissions within a stated time. Such person shall bear the cost of measurement and preparing the report of measured emissions. Failure of such person to submit a report acceptable to the commissioner within the time stated shall be sufficient reason for the commissioner to suspend or deny a certificate to operate.

Condition 1-14: Visible Emissions Limited
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 211.3

Item 1-14.1:



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Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

Condition 9: Accidental release provisions.
Effective between the dates of 05/11/2004 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 68

Replaced by Condition(s) 1-15

Item 9.1:

If a chemical is listed in Tables 1,2,3 or 4 of 40 CFR §68.130 is present in a process in quantities greater than the threshold quantity listed in Tables 1,2,3 or 4, the following requirements will apply:

- a) The owner or operator shall comply with the provisions of 40 CFR Part 68 and;
- b) The owner or operator shall submit at the time of permit issuance (if not previously submitted) one of the following, if such quantities are present:
 - 1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a) or,
 - 2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan. Information should be submitted to:

USEPA Region 2
Air Compliance Branch
290 Broadway
New York, NY 10007-1866
ATTN: Accidental Release Program contact

Condition 1-15: Accidental release provisions.
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 68

Replaces Condition(s) 9

Item 1-15.1:

If a chemical is listed in Tables 1,2,3 or 4 of 40 CFR §68.130 is present in a process in quantities greater than the threshold quantity listed in Tables 1,2,3 or 4, the following requirements will apply:

- a) The owner or operator shall comply with the provisions of 40 CFR Part 68 and;
- b) The owner or operator shall submit at the time of permit issuance (if not previously submitted) one of the following, if such quantities are present:

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1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a) or,

2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan. Information should be submitted to:

Risk Management Plan Reporting Center
C/O CSC
8400 Corporate Dr
Carrollton, Md. 20785

The following conditions are subject to annual compliance certification requirements for Title V permits only.

Condition 1: Emission Unit Definition
Effective between the dates of 05/11/2004 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-6

Item 1.1(From Mod 1):

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: U-00001

Emission Unit Description:

At this emission unit unadulterated wood chips (chipped pallets) are fired in a four (4) cell fuel cell combustor.

The emissions are controlled by staged combustion with flue gas recirculation, a multicyclone with optional ash reinjection and a baghouse. Steam from the boiler is used to turn steam turbine generator set(s) and will have a gross generating capacity of 7 megawatts of electricity. 3.79 MW will be used to meet the permittee's contractual agreement with Niagara Mohawk and the balance will be used for in house consumption.

Building(s): 001

Item 1.2(From Mod 0):

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: U-00002 End Date: 02/28/2005

Emission Unit Description:

A natural gas fired Caterpillar engine generator G398



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(CAT 4) produces electricity for sale to the grid. The waste heat from the cooling jacket and exhaust is recovered and used in the new wood drying kiln. See process 002 for more details.

Building(s): 001

****** Emission Unit Level ******

Condition 11: Emission Point Definition By Emission Unit
Effective between the dates of 05/11/2004 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-6

Item 11.1(From Mod 1):

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-00001

Emission Point: BOILR

Height (ft.): 53 Diameter (in.): 50
NYTMN (km.): 4687.8 NYTME (km.): 198.1 Building: 001

Emission Point: 00001

Removal Date: 09/30/2006
Height (ft.): 20 Diameter (in.): 72
NYTMN (km.): 4688.02 NYTME (km.): 198.129 Building: 001

Item 11.2(From Mod 0):

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-00002

Emission Point: 00002

Removal Date: 02/28/2006
Height (ft.): 20 Diameter (in.): 8
NYTMN (km.): 4687.8 NYTME (km.): 198.1 Building: 001

Emission Point: 00003

Removal Date: 02/28/2006
Height (ft.): 20 Diameter (in.): 8
NYTMN (km.): 4687.8 NYTME (km.): 198.1 Building: 001

Condition 12: Process Definition By Emission Unit
Effective between the dates of 05/11/2004 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-6

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Item 12.1(From Mod 1):

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00001

Process: BLR

Source Classification Code: 1-02-009-07

Process Description:

This process is the combustion of wood in a (4) four cell fuel cell combustor with fuel regulation and distribution, and a water cooled, fixed grate. The heat of combustion is concentrated on the grate by refractory walls. The under fire combustion air is introduced under the grate and radially just above the grate. Over fire combustion air is divided into two sections, low pressure, and high pressure. Thus the combustion is divided into 3 zones with independent air flow control. The combustion gases pass from the 4 fuel cells to a common combustion chamber.

Here the combustion process has time to complete. The flue gas passes through a steam super heater, convection boiler tubes, and an economizer before exiting the boiler section. A mechanical collector drops out large particles for optional reinjection. The flue gas passes through a bag filter, and an induced draft fan before exiting through a stack. This process will provide steam to steam turbine generator sets that have a capacity to generate 7 MW, gross.

Emission Source/Control: 00BLR - Combustion

Design Capacity: 115 million BTUs per hour

Emission Source/Control: 000FF - Control

Control Type: FABRIC FILTER

Emission Source/Control: 00CYC - Control

Control Type: MULTIPLE CYCLONE W/ FLY ASH INJECTION

Emission Source/Control: 00FGR - Control

Control Type: FLUE GAS RECIRCULATION

Item 12.2(From Mod 0):

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00001

Process: 001

Source Classification Code: 2-01-002-01

Process End Date: 12/31/2005

Process Description:

This includes a natural gas fired Allison 501 KB combined cycle combustion gas turbine generator set. According to



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the manufacturer's rating, the peak heat input to the turbine is 39.5 million Btu/hr and the corresponding output is 3.05 megawatts. Waste heat from the exhaust is recovered in a heat recovery steam generator (steam boiler). The steam powers a steam turbine generator set whose output is approximately 1.2 megawatts. About 0.5 megawatt is used by the facility for its operating needs. The plant has a 30 year contract with Niagara Mohawk Power Company, where it can sell up to 3.79 megawatts to the grid..

Additional waste heat from the gas turbine exhaust (after the waste heat boiler) is used for lumber drying in 6 kilns.

This turbine has been built to be fired only on natural gas. Any modification to the unit to have dual fuel (oil and gas) capability will require the approval of the Department.

Emission Source/Control: 00001 - Combustion

Design Capacity: 39.5 million Btu per hour

Item 12.3(From Mod 0):

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00002

Process: 002

Source Classification Code: 2-02-002-04

Process End Date: 2/28/2005

Process Description:

A Caterpillar G398 natural gas fired engine generator set (CAT 4, 640 hp) with a low compression ratio (LCR) supplements the plant's production of electricity (450 kW) and supplies heat to the new kilns. The water from engine cooling water jacket passes through two heat exchangers to recover waste heat from the exhaust. The exhaust pipe splits before the heat exchangers, goes through the heat exchangers in a parallel path and exhausts to the atmosphere through two emission points. If needed, additional heat is added to the cooling water on its way to the kilns by a natural gas fired boiler (4.18 mmBtu/hr, exempt from permitting). The water is circulated through closed loop heat exchangers in the new kiln. The cooler water is then returned to the engine and the cycle repeats. The lumber drying only requires a high level of heat in the early stages of the drying cycle. However, to be conservative the application is based on the engine

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operating all the time at full load.

Emission Source/Control: 00002 - Combustion
Design Capacity: 5.6 million Btu per hour

**Condition 1-16: Emission Unit Permissible Emissions
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 201-7

Item 1-16.1:

The sum of emissions from all regulated processes specified in this permit for the emission unit cited shall not exceed the following Potential to Emit (PTE) rates for each regulated contaminant:

Emission Unit: U-00001

CAS No: 000630080 (From Mod 1)
Name: CARBON MONOXIDE
PTE(s): 221,628 pounds per year
25.3 pounds per hour

CAS No: 0NY210000 (From Mod 1)
Name: OXIDES OF NITROGEN
PTE(s): 25.3 pounds per hour
221,628 pounds per year

**Condition 1-17: Capping Monitoring Condition
Effective for entire length of Permit**

Applicable Federal Requirement: 6NYCRR 201-7

Item 1-17.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

6NYCRR 231-2.2(a)(3)
40CFR 52-A.21

Item 1-17.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 1-17.3:

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating



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hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Item 1-17.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 1-17.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 1-17.6:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 1-17.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: MONITORING OF PROCESS OR CONTROL
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

- 1.) The daily average heat input to the boiler shall not exceed 115 mmBtu/hr in order to limit CO and NOx emissions.
- 2.) Upon startup of the boiler system, one representative sample of incoming fuel shall be collected from the feed conveyor daily for one week. All seven samples will be sent to a lab for analysis. The results will be used to establish a baseline heat content, moisture content, and bulk density of the fuel. For the next 6 months one representative sample shall be collected per month from the fuel feed conveyor and sent to a lab for analysis of the above parameters. The lab results will be used to reestablish/reconfirm the baseline values.
- 3.) After the first seven days, the permittee shall collect one fuel sample per day from the fuel conveyor,

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weigh, and compare the bulk density to the baseline once it is established. The sample volume shall be consistent and be one cubic foot or more. If there is a greater than 20 percent deviation in the bulk density of the fuel then an 'on-site' moisture test shall be conducted. The baseline heat content shall be adjusted appropriately to reflect the actual moisture content of the fuel and used to calculate the boiler's heat input.

4.) The average hourly heat input to the boiler shall be determined from above results and data from the fuel weigh belt daily.

5.) The daily bulk density results shall be recorded in a log that contains the baseline information above. If there was a 20 percent deviation for the bulk density baseline, the actual moisture content and the corrected heat content value shall be recorded. The weigh belt reading at the beginning and end of each day, the weight of fuel combusted for the day, and the average hourly heat input for the day shall be recorded. These records must be kept on site and made available for review by Department staff, upon request.

6.) The compliance status of this condition shall be reported semi-annually and include the heat input for those days when the average hourly heat input was greater than 115 mmBtu/hour, along with the cause and the corrective actions taken.

Parameter Monitored: HEAT INPUT

Upper Permit Limit: 115 million Btu per hour

Monitoring Frequency: DAILY

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

Subsequent reports are due every 6 calendar month(s).

Condition 1-18: Capping Monitoring Condition
Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 201-7

Item 1-18.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would otherwise be subject to:

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40CFR 52-A.21

Item 1-18.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 1-18.3:

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Item 1-18.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 1-18.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 1-18.6:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 1-18.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

1.) Carbon Monoxide (CO) emissions shall not exceed 0.22 pounds per million Btu heat input.

2.) Within 60 days of reaching maximum production but no later than 180 days after initial startup of the unit, an emission source emission test shall be conducted. A compliance test must also be conducted during years 3 and 5 of the permit.

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3.) The Department may request additional CO emission testing at its discretion and in writing to evaluate compliance.

4.) The emission testing protocol shall be submitted for Department approval at least 30 days before testing is scheduled, and a test report shall be submitted to the Department within 60 days of the test.

5.) Semi-annually report the date of the most recent compliance test, the test results, and the compliance status.

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 0.22 pounds per million Btus

Reference Test Method: EPA Method 10

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

Subsequent reports are due every 6 calendar month(s).

Condition 13: Compliance Certification

Effective between the dates of 05/11/2004 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 227-1.3(a)

Expired by Mod 1

Item 13.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 13.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

- 1) No person shall operate a stationary combustion installation which exhibits greater than 20 percent opacity (six minute average), except for one six-minute

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period per hour of not more than 27 percent opacity.

2) Excess opacity is not anticipated from this emission source due to the combustion of natural gas. However, during any combustion problem smoke may be created. Under such circumstances, the permittee shall observe the stack to determine whether any visible emissions are present. If visible emissions are observed, the permittee shall conduct an EPA Method 9 opacity evaluation and keep the results on site and report the results of the observation in the 6 month monitoring report. In the event an opacity exceedance occurs, the permittee shall report the results and the cause of the problem to the Department within 3 working days of the observation. If the problem is recurring and requires correction, the permittee shall be required to propose a program of correction for Department review.

3) The compliance status of this condition shall be reported in the semiannual compliance status report.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: EPA Method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2004.

Subsequent reports are due every 6 calendar month(s).

Condition 1-19: Compliance Certification

Effective for entire length of Permit

Applicable Federal Requirement: 6NYCRR 227-2.4(b)(2)

Item 1-19.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 1-19.2:

Compliance Certification shall include the following monitoring:

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Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

- 1.) Nitrogen Oxide (NOx) emissions shall not exceed 0.22 pounds per million Btu heat input.
- 2.) Within 60 days of reaching maximum production but no later than 180 days after initial startup of the unit, an emission source emission test shall be conducted. A compliance test must also be conducted during years 3 and 5 of the permit.
- 3.) The Department may request a NOx Continuous Emission Monitoring System (CEMS) in the event that the Compliance Assurance Monitoring (CAM) incorporated in this permit is not performing adequately. The facility would be advised in writing of any such concern.
- 3.) The emission testing protocol shall be submitted for Department approval at least 30 days before testing is scheduled, and a test report shall be submitted to the Department within 60 days of the test.
- 4.) Semi-annually report the date of the most recent compliance test, the test results, and the compliance status.

Upper Permit Limit: 0.22 pounds per million Btus

Reference Test Method: EPA Methods 7, 7E or 19

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

Subsequent reports are due every 6 calendar month(s).

**Condition 1-20: Date of construction notification.
Effective for entire length of Permit**

Applicable Federal Requirement: 40CFR 60.7(a), NSPS Subpart A

Item 1-20.1:

This Condition applies to Emission Unit: U-00001

Item 1-20.2:

Any owner or operator subject to this part shall furnish the Administrator with the following information:



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- 1) a notification of the date construction or reconstruction commenced, postmarked no later than 30 days after such date;
- 3) a notification of the actual date of initial start up, postmarked within 15 days after such date;
- 4) a notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless the change is specifically exempted under 40 CFR 60. The notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capability of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional information regarding the change;
- 5) a notification of the date upon which the demonstration of continuous monitoring system performance commences, postmarked not less than 30 days prior to such date;
- 6) a notification of the anticipated date for conducting the opacity observations, postmarked not less than 30 days prior to such date; and
- 7) a notification that continuous opacity monitoring system data results will be used to determine compliance with the applicable opacity standard during the performance test, postmarked not less than 30 days prior to the performance test.

Condition 1-21: Excess Emissions Report
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.7(c), NSPS Subpart A

Item 1-21.1:

This Condition applies to Emission Unit: U-00001

Item 1-21.2:

Affected owners or operators shall submit an excess emissions report and/or a summary report form (as defined in 40 CFR 60.7(d)) semi-annually (or more frequently as required by the applicable Subpart or the Administrator), to the Administrator. These reports shall be post marked no later than 30 days after each calendar quarter (or as appropriate), and shall contain the following information:

- 1) the magnitude of excess emissions computed, any conversion factors used, the date and time of each occurrence, and the process operating time during the reporting period;
- 2) specific identification of each period of excess emissions that occur during startup, shutdown, or malfunction, where the nature, cause, and corrective action are provided for a malfunction;
- 3) the date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and



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4) when no excess emissions have occurred or when the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be provided in the report.

Condition 1-22: Excess emissions report.
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.7(d), NSPS Subpart A

Item 1-22.1:

This Condition applies to Emission Unit: U-00001

Item 1-22.2:

An excess emissions report and/or a summary report, for each pollutant monitored, shall be sent to the Administrator quarterly (or as required), in the form prescribed in Figure 1 of subdivision 60.7(d).

Condition 1-23: Performance testing timeline.
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.8(a), NSPS Subpart A

Item 1-23.1:

This Condition applies to Emission Unit: U-00001

Item 1-23.2:

Within 60 days after achieving the maximum production rate, but not later than 180 days after initial startup of the facility, the owner or operator of the facility shall conduct performance testing and provide the results of such tests, in a written report, to the Administrator.

Condition 1-24: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.13(a), NSPS Subpart A

Item 1-24.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Item 1-24.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

For the purposes of this section, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of this section upon promulgation of performance specifications for continuous



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monitoring systems under appendix B to this part and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, appendix F to this part, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

Subsequent reports are due every 6 calendar month(s).

Condition 1-25: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.43b(c)(1), NSPS Subpart Db

Item 1-25.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 1-25.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

- 1.) Particulate emissions shall not exceed 0.10 pounds per million Btu.
- 2.) Within 60 days of reaching maximum production but no later than 180 days after initial startup of the unit, an emission source emission test shall be conducted. A compliance test must also be conducted during years 3 and 5 of the permit.
- 3.) The Department may request additional particulate emission testing at its discretion and in writing to evaluate compliance.
- 4.) The emission testing protocol shall be submitted for Department approval at least 30 days before testing is scheduled, and a test report shall be submitted to the Department within 60 days of the test.

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5.) Semi-annually report the date of the most recent compliance test, the test results, and the compliance status.

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: EPA Method 5

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: 1 HOUR MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

Subsequent reports are due every 6 calendar month(s).

Condition 1-26: Compliance Certification

Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.43b(f), NSPS Subpart Db

Item 1-26.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 1-26.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

1.) Emissions shall not exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

2.) A continuous opacity monitoring system (COMS) shall be installed, calibrated, maintained and operated for measuring the opacity of emissions discharged to the atmosphere and record the output of the system. The COMS must meet Performance Specification 1 of 40 CFR Part 60 Appendix B.

3.) Excess opacity shall be reported semi-annually as

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required by 40 CFR Part 60.7(c).

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: EPA Method 9

Monitoring Frequency: CONTINUOUS

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

Subsequent reports are due every 6 calendar month(s).

Condition 1-27: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 60.46b(d), NSPS Subpart Db

Item 1-27.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 1-27.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

- 1.) Emissions shall not exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity.
- 2.) Within 60 days of reaching maximum production but no later than 180 days after initial startup of the unit, an initial performance test must be completed.
- 3.) The emission testing protocol shall be submitted for Department approval at least 30 days before testing is scheduled, and a test report shall be submitted to the Department within 60 days of the test.
- 4.) Semi-annually report the date of the most recent compliance test, the test results, and the compliance status.

Parameter Monitored: OPACITY



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Upper Permit Limit: 20 percent
Reference Test Method: EPA Method 9
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 1-28: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 64

Item 1-28.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 1-28.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

This emission of particulates from this emission unit is subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) because the pre-control emission potential is greater than 100 tons per year. Parametric monitoring will indicate if the particulate emission control equipment is operating properly and whether it needs to be inspected or may be in need of repairs. Particulates from the wood fired boiler are removed from the exhaust stream when the combustion gases pass through a multiclone mechanical collection device and then a baghouse.

The emission unit is a 115 MM Btu/hr Wellons Fuel Cell wood-fired boiler which is subject to 40 CFR Part 60 Subpart Db, for particulate and opacity. The Subpart Db particulate limit is 0.10 lb/MMBtu and is more stringent than the limit in 6NYCRR Part 227-1.

The particulate CAM program is summarized below:

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Indicator

1. Opacity.
2. Pressure drop across the baghouse.
3. Inspection/maintenance (I/M) of the baghouse.

Measurement Approach:

1. Opacity shall be measured continuously using a Continuous Opacity Monitoring System (COMS).
2. Pressure drop shall be measured continuously using a pressure differential gauge.
3. The I/M program shall include daily verification of cleaning system performance, and an annual baghouse leak detection test and internal inspection.

Indicator Range:

1. I/M - if daily performance checks, annual leak detection test, or annual inspection are not conducted it will be an excursion.
2. Initial assessment of indicators shall be conducted during the time period which starts after the process starts operation until stack testing is completed to determine opacity and pressure drop indicator tolerance limits (ITLs). The two ITLs are those values which are indicative of normal operation during which the particulate limit is not likely to be exceeded.

However, there may be conditions during which the particulate emission limit may be exceeded. For those circumstances an opacity limit will serve as the indicator for the emission limit (IEL). The IEL shall be determined during the initial assessment

Within 60 days of compliance stack testing, the facility shall submit to the department for review and approval a report which establishes each proposed ITL and IEL. After an indicator value has been established the facility shall justify any proposed changes to the department by repeating the testing and calibration program used to set the current indicator ranges.

3. Should any indicator measurement fall outside of the established indicator value for a period of one hour or more, it shall constitute an excursion. Excursions shall trigger an investigation. Based on the findings of the investigation, corrective actions shall be taken to regain

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operation within established normal operating range.

Performance Criteria:

1. Opacity - the COMS shall be installed and operated in accordance with Performance Standard 1 in 40 CFR Part 60 Appendix B.
2. Pressure drop - pressure drop shall be measured across the baghouse inlet and outlet, the accuracy of the device is 0.5 inches of water column.
3. I/M - a baghouse leak detection test is conducted annually and it is inspected internally to determine bag condition.

Quality Assurance/Quality Control:

1. Opacity - the COMS shall be installed and operated in accordance with Performance Standard 1 in 40 CFR Part 60 Appendix B
2. Pressure drop - the pressure gauge will be calibrated quarterly, and the pressure taps will be checked weekly for plugging
3. I/M - qualified personnel will conduct daily performance checks and the annual leak detection test and inspection

Data Collection Procedures:

1. Opacity - readings will be measured and recorded continuously according to 40 CFR Part 60 Subpart A
2. Pressure drop - readings will be recorded continuously.
Opacity and pressure drop measurements shall be recorded using a data acquisition handling system (DAHS) with visual displays for the operator. The data shall be reduced to a 15 minute and then a 1 hour average rate. The facility shall collect at least 95% of available data for during each semi-annual reporting period required by this permit.
3. I/M - records shall be maintained to document the daily performance checks and annual inspections along with any required maintenance.

Recordkeeping: All data required to be collected by this conditions shall be kept in an appropriate data log and kept on site. All such data shall be made available to the department upon request during normal business hours.

Reporting: If an opacity measurement indicates that a

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potential exceedance of the particulate limit has occurred, an exceedance of an IEL, the cause of the problem, the duration, what steps were taken to correct the problem and the measured opacity shall be recorded in a log kept on site. Each such incident shall be reported as a deviation in the required semi-annual report required by this permit on forms prepared by the department.

Quality Improvement Plan (QIP): The owner or operator shall develop and implement a QIP when an accumulation of excursions is outside an ITL indicator value for 5 percent or more of a pollutant-specific emissions unit's operating time. The duration of excursions during any semi-annual reporting period shall be tracked and recorded using continuous monitoring instruments and the DAHS. The results of this compilation shall be reported semi-annually. An exceedance of the 5% threshold shall be reported as a deviation in the semi-annual monitoring report required by this permit and should include a QIP for department review and approval.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

Subsequent reports are due every 6 calendar month(s).

Condition 1-29: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40CFR 64

Item 1-29.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 1-29.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emissions of NOx from this emission unit are subject to

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40 CFR Part 64, Compliance Assurance Monitoring (CAM) because the precontrol NO_x emission potential is greater than 100 tons per year. Parametric monitoring will indicate if the NO_x emission control equipment is operating properly or whether it needs to be inspected or may be in need of repairs. NO_x emissions from the wood fired boiler are controlled by flue gas recirculation (FGR) and staged combustion.

The emission unit is a 115 MMBtu/hr Wellons Fuel Cell wood-fired boiler which is subject to 6 NYCRR Part 227-2, NO_x RACT. The NO_x emission limit is an hourly average of 0.22 lb/MMBtu heat input.

The NO_x CAM program is summarized below:

Indicators:

1. Excess air to load ratio (EALR),
2. Combustion temperature and
3. Flue gas recirculation (FGR) damper position.

Measurement Approach:

1. EALR and
2. Combustion temperature shall be measured continuously and averaged hourly as a check of the boiler operating condition and shall be measured at the boiler outlet.
3. FGR damper position shall be used to determine the correct amount of flue gas to be recirculated.

Indicator Range:

1. Initial assessment of indicators shall be conducted during the time period which starts after the process starts operation until stack testing is completed in order to determine indicator tolerance limits (ITLs). The three ITLs are those values which are indicative of normal operation during which the NO_x limit is not likely to be exceeded.

However, there may be conditions during which the NO_x emission limit may be exceeded. For those circumstances a ratio of EALR limit will serve as the indicator for the emission limit (IEL). IEL shall be determined during the initial assessment of indicators.

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2. Should any indicator measurements fall outside of the established normal operating range(s) for a period of one hour or more, it shall constitute an excursion. Excursions which indicate an exceedance of the NO_x emission limit may be occurring shall trigger an investigation that shall include an emissions measurement with a portable NO_x analyzer to determine compliance with the NO_x emission standard. The emissions measurement shall be no less than 15 minutes in duration.

Within 60 days of compliance stack testing, the facility shall submit to the department for review and approval a report which establishes and justifies each proposed indicator range. After an indicator range has been established the facility shall justify any proposed changes to the department by repeating the testing and calibration program used to set the current indicator ranges.

3. Should any indicator fall outside of the established indicator value for a period of one hour or more, it shall constitute an excursion. Excursions shall trigger an investigation. Based on the findings of the investigation, corrective actions shall be taken to regain operation within established normal operating range.

Performance Criteria:

1. The oxygen monitor shall have a minimum accuracy of less than 2 percent calibration error to zero and upscale reference gases. Load measurement shall have an accuracy as specified by the manufacturer of the instrument.
2. FGR damper position shall be established by the preliminary testing program described above.
3. Combustion temperature monitoring system shall have a minimum accuracy of less than 3% error.

Quality Assurance/Quality Control:

1. A zero and upscale calibration of oxygen monitor shall be done weekly. Calibration for load shall be done according to the frequency and protocol specified by the measurement instrument manufacturer.
2. FGR damper position shall be checked daily for unauthorized change.
3. Combustion temperature shall have an annual calibration check and the date and results recorded in a log maintained on site.

(The above data and results of QA checks shall be recorded

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in a log and kept on site.)

Data Collection Procedures: EALR and combustion temperature shall be recorded continuously (1 second intervals) using a data acquisition handling system (DAHS). The data shall be reduced to a 15 minute and then a 1 hour average rate. The facility shall collect at least 95% of available data for EALR and combustion temperature during each semi-annual reporting period prescribed by this permit.

Recordkeeping: All data required to be collected by this conditions shall be kept in an appropriate data log and kept on site. All such data shall be made available to the department upon request during normal business hours.

Reporting: If there is indication that an exceedance of the NO_x limit, IEL, has occurred (using a portable NO_x analyzer), at least 4 measurements shall be taken, as soon as practicable after making that determination, during at least a 20 minute period. Measurements shall be taken not more frequently than 5 minute intervals. Results shall be recorded in a log kept on site. Each such incident shall be reported as a deviation in the required semi-annual report required by this permit on forms prepared by the department.

Quality Improvement Plan (QIP): The owner or operator shall develop and implement a QIP when an accumulation of excursions of EALR or combustion temperature are outside the ITL indicator range for 5 percent or more of a pollutant-specific emissions unit's operating time. The duration of excursions during any semi-annual reporting period shall be tracked and recorded using continuous monitoring instruments and the DAHS. The results of this compilation shall be reported semi-annually. An exceedance of the 5% threshold shall be reported as a deviation in the semi-annual monitoring report required by this permit along with a QIP plan submission for department review and approval.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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Subsequent reports are due every 6 calendar month(s).

Condition 16: Compliance Certification

Effective between the dates of 05/11/2004 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 60.332(a)(2), NSPS Subpart GG

Expired by Mod 1

Item 16.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Process: 001

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 16.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

- 1.) NO_x stack emissions shall be tested weekly using a portable combustion analyzer. The results shall be logged and reports kept on site and available for Department review for a period of at least 5 years. Any exceedance shall be reported to the Department within 48 hours. Test results shall be submitted to the Department 30 days following each calendar quarter.
- 2.) The portable combustion analyzer shall be calibrated according to the manufactures recommended procedures. Records of each calibration shall be kept on site and made available for Department review upon request.
- 3.) Each test shall consist of 4 grab samples taken consecutively during a one hour period. Testing shall be taken during a period when the turbine is firing under normal operating conditions. The average of the 4 measurements shall be used for compliance screening.
- 4.) The emission limit according to 40 CFR 60.332(a), "Standard for Nitrogen Oxides", is 157 ppmv.
- 5.) The facility may request a sampling frequency modification in the event the weekly sampling results

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demonstrate substantial compliance with the NOx standard.

Upper Permit Limit: 157 parts per million by volume
(dry, corrected to 15% O2)

Reference Test Method: Portable Analyzer

Monitoring Frequency: WEEKLY

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2004.

Subsequent reports are due every 3 calendar month(s).

Condition 17: Compliance Certification

Effective between the dates of 05/11/2004 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 60.332(a)(2), NSPS Subpart GG

Expired by Mod 1

Item 17.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Process: 001

Regulated Contaminant(s):

CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 17.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

1.) No owner or operator shall discharge to the atmosphere from a stationary gas turbine, emissions of nitrogen oxides in excess of the following:

$$STD = 0.0150 * [(14.4) / Y] + F$$

Where: STD = allowable nitrogen oxide emissions in percent volume at 15% excess oxygen on a dry basis,

Y = manufacturer's rated heat rate at manufacturer's rated peak load (kilojoules per watt hour) or the actual measured heat rate based on the lower heating value of the fuel as measured at actual peak load of the facility. The

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value of Y shall not exceed 14.4 kilojoules per watt hour,

F = nitrogen oxide emission allowance for fuel bound nitrogen:

Fuel bound nitrogen % by weight, where F equals NOx % by volume

$N \leq 0.015 : F = 0$

$0.015 < N \leq 0.1 : 0.04(N)$

$0.1 < N \leq 0.25 : 0.004 + 0.0067(N - 0.1)$

$N > 0.25 : 0.005$

2.) Using the manufacture's rated peak load, Y, of 13.73 kilojoules per watt hour, and a fuel bound nitrogen percent by weight, F, of 0 (zero) the nitrogen oxide emission limit is 157 ppmv NOx at 15% oxygen on a dry basis.

3.) EPA's October 20, 1999 custom fuel monitoring schedule for 40 CFR 60.334(b)(2) states that, "Monitoring of fuel nitrogen shall not be required while natural gas is the only fuel fired in the gas turbine." Since fuel nitrogen data is not required to be obtained, the Department took a conservative approach and assumed that there is no nitrogen in the fuel (which is not true), so N was $\leq 0.015\%$, making $F = 0$.

4.) NOx emission performance testing is required at least once during each 5 year permit term. The facility shall conform with the following:

a.) The facility shall submit a stack test protocol for Department review and approval by the end of the second permit year.

b.) The facility shall undertake stack sampling within 60 days of Department written approval of the stack test protocol.

c.) The facility shall submit a stack test report for Department review and approval within 60 days of completing the stack test.

d.) The stack testing shall conform with the requirements of 40 CFR 60.335, "Test Methods and Procedures".

Upper Permit Limit: 157 parts per million by volume
(dry, corrected to 15% O₂)



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Reference Test Method: EPA Method 20
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2004.
Subsequent reports are due every 6 calendar month(s).

Condition 18: Compliance Certification
Effective between the dates of 05/11/2004 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 60.333(b), NSPS Subpart GG

Expired by Mod 1

Item 18.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001
Process: 001

Regulated Contaminant(s):
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 18.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

No owner or operator of a stationary gas turbine subject to 40CFR60 Subpart GG shall burn in that turbine any fuel which contains sulfur in excess of 0.8 percent by weight. The owner or operator shall monitor sulfur content of the fuel being fired in the turbine according to the frequency specified in 40CFR60.334(b).

Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.8 percent by weight
Reference Test Method: see 40 CFR 60.335(d)
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: QUARTERLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2004.
Subsequent reports are due every 3 calendar month(s).

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Condition 19: Compliance Certification

Effective between the dates of 05/11/2004 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 60.334(b)(2), NSPS Subpart GG

Expired by Mod 1

Item 19.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Process: 001

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 19.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

40 CFR 60.334(b)(2) requires that fuel fired in the combustion gas turbine be monitored daily for its sulfur content. However, the facility requested a variance from this requirement, and EPA granted a variance in an October 20, 1999 letter. The EPA approved custom fuel monitoring schedule states:

- 1.) "Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. These reference methods are located in 40 CFR 60.335(d)."
- 2.) "Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for a period of six months. If this monitoring shows little variability in the fuel sulfur content and indicates consistent compliance with 40 CFR 60.333, the fuel sulfur content shall be monitored quarterly for the next six quarters."
- 3.) "Upon completion of the six quarter monitoring period in Item 2, if the fuel sulfur content monitoring results show little variability and consistent compliance with 40 CFR 60.333, then fuel sulfur content shall be

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monitored semiannually. This semiannual monitoring shall be conducted during the first and third quarters of each calendar year."

4.) "Should any fuel sulfur monitoring, as required by Item 2 and 3 above, indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify EPA and the New York State Department of Environmental Conservation (NYSDEC) within 15 calendar days of the occurrences(s). Fuel sulfur content monitoring shall be conducted weekly during the interim period while the custom schedule is being re-examined by EPA."

5.) "Records of sample analysis and fuel supply pertinent to this custom fuel monitoring schedule shall be retained for a period of five (5) years, and be available for inspection by personnel of federal, state, and local air pollution control agencies."

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 0.8 percent by weight

Reference Test Method: see 40 CFR 60.335(d)

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2004.

Subsequent reports are due every 3 calendar month(s).

Condition 20: Compliance Certification

Effective between the dates of 05/11/2004 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 60.334(c)(2), NSPS Subpart GG

Expired by Mod 1

Item 20.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00001

Process: 001

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

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Item 20.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

For the purposes of the excess emissions and monitoring system performance report require by 40 CFR 60.7(c), any period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent by weight, shall be reported as a period of excess emissions.

The fuel sulfur content shall be monitored according to the EPA special fuel monitoring schedule that is part of the permit condition for citation 40 CFR 60.334(b)(2).

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 0.8 percent by weight

Reference Test Method: see 40 CFR 60.335

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY
TIME (INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2004.

Subsequent reports are due every 3 calendar month(s).

Condition 21: Nitrogen oxides emission rate calculation

Effective between the dates of 05/11/2004 and Permit Expiration Date

Applicable Federal Requirement: 40CFR 60.335(c)(1), NSPS Subpart GG

Expired by Mod 1

Item 21.1:

This Condition applies to Emission Unit: U-00001

Process: 001

Item 21.2:

The owner or operator shall determine compliance with the nitrogen oxide (NO_x) standard using the following equation:

$$\text{NO}_x = (\text{NO}_{x0}) (\text{Pr}/\text{Po})^{0.5} e^{19(\text{Ho}-0.00633)} (288 \text{ degrees K}/\text{Ta})^{1.53}$$

Where:

NO_x = emission rate of NO_x at 15 % O₂ and ISO standard ambient conditions, volume percent.



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NO_{xo}= observed NO_x concentration, ppm by volume.

Pr= reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.

Po=observed combustor inlet absolute pressure at test, mm Hg.

Ho=observed humidity of ambient air, g H₂O/g air.

e= 2.718

Ta=ambient temperature, degrees K.

**Condition 22: Use of Method 20 for determining NO_x and SO₂
Effective between the dates of 05/11/2004 and Permit Expiration Date**

Applicable Federal Requirement: 40CFR 60.335(c)(3), NSPS Subpart GG

Expired by Mod 1

Item 22.1:

This Condition applies to Emission Unit: U-00001
Process: 001

Item 22.2:

Method 20 shall be used for determining the nitrogen oxide, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NO_x emissions shall be determined at each of the following loads; 30, 50, 75, and 100 percent.

**Condition 23: Methods for determining compliance with the sulfur content standard
Effective between the dates of 05/11/2004 and Permit Expiration Date**

Applicable Federal Requirement: 40CFR 60.335(d), NSPS Subpart GG

Expired by Mod 1

Item 23.1:

This Condition applies to Emission Unit: U-00001
Process: 001

Item 23.2:

The owner or operator shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows:

for liquid fuels use ASTM D 2880-71, 78, or 96, and

for gaseous fuels use ASTM D 1072-80 or 90 (reapproved 1994), D 3031-81, D 4084-82 or 94, or D 3246-81, 92, or 96 (incorporated by reference see 40 CFR 60.17).

**Condition 24: Requirement for analysis of Nitrogen and Sulfur in fuel
Effective between the dates of 05/11/2004 and Permit Expiration Date**

Applicable Federal Requirement: 40CFR 60.335(e), NSPS Subpart GG



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Item 24.1:

This Condition applies to Emission Unit: U-00001
Process: 001

Item 24.2:

To meet the requirements 40 CFR 60.334(b), the owner or operator shall use methods specified in 40 CFR 60.335(a) and (d) to determine the nitrogen and sulfur content of fuels being burned. The analysis may be performed by the owner or operator, a service contractor, the fuel vendor, or any qualified agency.

Condition 25: Compliance Certification

Effective between the dates of 05/11/2004 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 202-2.4(a)

Expired by Mod 1

Item 25.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00002

Item 25.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

- 1.) NO_x stack emissions shall be tested weekly using a portable combustion analyzer. The results shall be logged and reports kept on site and available for Department review for a period of at least 5 years. Test results shall be submitted to the Department 30 days following each calendar quarter.
- 2.) The portable combustion analyzer shall be calibrated according to the manufactures recommended procedures. Records of each calibration shall be kept on site and made available for Department review upon request.
- 3.) Each test shall consist of four (4) grab samples taken consecutively during a one hour period. The test shall be conducted when the engine is operating under normal operating conditions. The average of the four (4) measurements shall be used to calculate the hourly and annual emissions from the unit.
- 4.) The facility may request a sampling frequency modification in the event the weekly sampling results are

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consistently similar.

5) The calculated annual emissions shall be reported annually as part of the annual emission statement.

Monitoring Frequency: WEEKLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2005.
Subsequent reports are due every 12 calendar month(s).

Condition 26: Compliance Certification
Effective between the dates of 05/11/2004 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 227-1.3(a)

Expired by Mod 1

Item 26.1:

The Compliance Certification activity will be performed for:

Emission Unit: U-00002

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 26.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL
DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

- 1) No person shall operate a stationary combustion installation which exhibits greater than 20 percent opacity (six minute average), except for one six-minute period per hour of not more than 27 percent opacity.
- 2) Excess opacity is not anticipated from this emission source due to the combustion of natural gas. However, during any combustion problem smoke may be created. Under such circumstances, the permittee shall observe the stack to determine whether any visible emissions are present. If visible emissions are observed, the permittee shall conduct an EPA Method 9 opacity evaluation and keep the results on site and report the results of the observation in the 6 month monitoring report. In the event an opacity exceedance occurs, the permittee shall report the results and the cause of the problem to the Department within 3

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working days of the observation. If the problem is recurring and requires correction, the permittee shall be required to propose a program of correction for Department review.

3) The compliance status of this condition shall be reported in the semiannual compliance status report.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: EPA Method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2004.

Subsequent reports are due every 6 calendar month(s).



STATE ONLY ENFORCEABLE CONDITIONS

****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

STATE ONLY APPLICABLE REQUIREMENTS

The following conditions are state applicable requirements and are not subject to compliance certification requirements unless otherwise noted or required under 6 NYCRR Part 201.

Condition 27: Contaminant List
Effective between the dates of 05/11/2004 and Permit Expiration Date

Applicable State Requirement: ECL 19-0301

Item 27.1:

Emissions of the following contaminants are subject to contaminant specific requirements in this



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permit(emission limits, control requirements or compliance monitoring conditions).

CAS No: 000630-08-0

Name: CARBON MONOXIDE

CAS No: 0NY210-00-0

Name: OXIDES OF NITROGEN

CAS No: 0NY075-00-0

Name: PARTICULATES

****** Emission Unit Level ******

**Condition 1-30: Compliance Demonstration
Effective for entire length of Permit**

Applicable State Requirement: 6NYCRR 211.2

Item 1-30.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: U-00001

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 1-30.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

- 1.) The department shall advise the facility of any odor complaints related to the storage of wood and stack emissions from this emission unit. Once nuisance odors have been substantiated, the department shall so advise the facility that unacceptable ambient odors exist as a result of facility odor emissions and the facility shall propose corrective action to the department for review and approval within 30 days of notification by the department.
- 2.) The facility shall report to the department any odor complaints received directly by the facility within 2 business days of receipt by fax, telephone or e-mail. The report shall describe when the alleged odor incident

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occured, steps taken by the facility to assess complaint(s) and, if verified, how the problem was resolved. All complaints and followup activities shall be recorded in a log maintained on site and made available to the department upon request during normal business hours.

3.) The determination of unacceptable ambient odors being present being caused by the facility shall be at the sole discretion of the department as a result of reasonable evaluation.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION